RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10	1650	,326B	
Source:			IFWO	
Date Processed by STIC:		8/-	20/05	

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IFWO

RAW SEQUENCE LISTING DATE: 08/20/2005
PATENT APPLICATION: US/10/650,326B TIME: 11:47:45

Input Set : A:\JJJ-P01-599.txt

Output Set: N:\CRF4\08202005\J650326B.raw

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3 <110> APPLICANT: Hruska, Keith A.
 4 McCartney, John E.
 5 Charette, Marc F.
 7 <120> TITLE OF INVENTION: CONJOINT ADMINISTRATION OF MORPHOGENS AND ACE INHIBITORS IN
        TREATMENT OF CHRONIC RENAL FAILURE
10 <130> FILE REFERENCE: JJJ-P01-599
12 <140> CURRENT APPLICATION NUMBER: 10/650,326B
13 <141> CURRENT FILING DATE: 2003-08-28
15 <150> PRIOR APPLICATION NUMBER: 60/406,431
16 <151> PRIOR FILING DATE: 2002-08-28
18 <160> NUMBER OF SEQ ID NOS: 31
20 <170> SOFTWARE: PatentIn version 3.2
22 <210> SEQ ID NO: 1
23 <211> LENGTH: 139
24 <212> TYPE: PRT
25 <213> ORGANISM: Homo sapiens
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37 Asp Gln Arq Gln Ala Cys Lys Lys His Glu Leu Tyr Val Ser Phe Arg
41 Asp Leu Gly Trp Gln Asp Trp Ile Ile Ala Pro Glu Gly Tyr Ala Ala
                          55
45 Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asn Ser Tyr Met Asn
                      70
49 Ala Thr Asn His Ala Ile Val Gln Thr Leu Val His Phe Ile Asn Pro
                  85
                                      90
53 Glu Thr Val Pro Lys Pro Cys Cys Ala Pro Thr Gln Leu Asn Ala Ile
             100
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57 Ser Val Leu Tyr Phe Asp Asp Ser Ser Asn Val Ile Leu Lys Lys Tyr
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61 Arg Asn Met Val Val Arg Ala Cys Gly Cys His
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66 <211> LENGTH: 97
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76 Leu Ser Ile Leu Gly Leu Pro His Arg Pro Arg Pro His Leu Gln Gly

Input Set : A:\JJJ-P01-599.txt

Output Set: N:\CRF4\08202005\J650326B.raw

77			:	20					25					30		
80 1	ys I	His A	Asn S	Ser 1	Ala	Pro	Met	Phe	Met	Leu	Asp	Leu	Tyr	Asn	Ala	Met
81			35					40					45			
84 7	Ala '	Val (Glu (Glu (Gly	Gly	Gly	Pro	Gly	Gly	Gln	Gly	Phe	Ser	Tyr	Pro
85		50					55					60				
88 :	Tyr :	Lys <i>l</i>	Ala '	Val	Phe	Ser	Thr	Gln	Gly	Pro	Pro	Leu	Ala	Ser	Leu	Gln
89 6						70					75					80
92 <i>I</i>	Asp :	Ser E	lis l	Phe :	Leu	Thr	Asp	Ala	Asp	Met	Val	Met	Ser	Phe	Val	Asn
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96 I																
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107					5					10					15	
110	Leu	${\tt Trp}$	Ala	Pro	Leu	Phe	Leu	Leu	۱ Arç	J Sei	: Ala	. Leu	Ala	Asp	Phe	Ser
111				20					25					30		
114	Leu	Asp		Glu	Val	His	Ser		Phe	e Ile	e His	s Arg		Leu	ı Arg	ßer
115			35					40					45		_	
118	Gln		Arg	Arg	Glu	Met		Arg	, Glı	ı Ile	e Leu		Ile	Leu	ιGly	<i>r</i> Leu
119		50					55					60				_
122	Pro	His	Arg	Pro	Arg		His	Leu	ı Glr	ı Gly	_	His	Asn	Ser	Ala	Pro
123						70			_		75		-			80
	Met	Phe	Met	Leu		Leu	Tyr	Asn	ı Alá		: Ala	a Val	. GIu	GIU		gly Gly
127		_		~	85		_,	_	_	90		_		1	95	~
	Gly	Pro	GIY	_	Gin	GLY	Phe	Ser	_		о Туг	т г	Ala			e Ser
131			~7	100	_	_		-	105			-		110		m1
	Thr	GIn	_	Pro	Pro	Leu	. Ата			ı G11	1 Asr	ser			е ьег	Thr
135	3	77.	115	11-4	77-7	34-4	0	120		7			125		. 7\	
	Asp		Asp	Met	Vai	Met			· vai	. ASI	т те	1 vai 140		נחוצ	ASL	Lys
139	C1	130	Dho	uic	Dro	7. ~~~	135		uic	, 7\ x -c	. cl.			Dho	. 7. cr	LOU
		Pile	Pne	птъ	PIO	150		nis	, UIS	, WI	155		AIG	Pile	: Ast	Leu 160
	145	Tara	т1.	Dro	C1.,			ת דת	175]	Th			C1.	Dhe	λνο	ıle ıle
147	ser	пур	TIE	PIO	165	_	Gru	ATC	ı va.ı	170		HIO	GIU	r File	175	
	Tr.cr	Tvc	Λcn	Тиг			G111	7120	Dhe			. Gla	Thr	· Dhe		, , Ile
151	тут	пуъ	Asp	180	116	Arg	Giu	ALC	185	_	, Per	GIC	. 1111	190		, 110
	Sar	Val	Tur		Val	T.e.11	Gln	Glu			. G1s	λrc	r Glu			Leu
155	DCI	Val	195	GIII	vul	ыси	. 01.11	200		, 1100	. 01)	711	205		1101	, Eca
	Dhe	T.011		Δen	Ser	Δra	Thr			. Δla	Ser	- Glu			, ጥዮዮ	Leu
159	1116	210	Leu	Mary	DEL	1119	215			, ,,,,,		220		. J_y	1	- -
	Val		Δen	Tle	Thr	Δla			· Acr	His	፣ ጥተተ			Asr	Pro	Arg
	225	1110	1.5p			230			1101		235					240
		Asn	Len	Glv	Len			Ser	· Val	Gli			Asr	Glu	r Glr	Ser
167	*****	1.011	u	O-1	245		. _ _ca	~~1		250					255	
	Ile	Asn	Pro	Lvs			Glv	Len	ı Ile			His	Glv	Pro		Asn
171				260		~	1		265			, -	1	270		
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Input Set : A:\JJJ-P01-599.txt

Output Set: N:\CRF4\08202005\J650326B.raw

174 Lys Gln Pro Phe Met Val Ala Phe Phe Lys Ala Thr Glu Val His Phe 178 Arg Ser Ile Arg Ser Thr Gly Ser Lys Gln Arg Ser Gln Asn Arg Ser 295 182 Lys Thr Pro Lys Asn Gln Glu Ala Leu Arg Met Ala Asn Val Ala Glu 310 315 186 Asn Ser Ser Ser Asp Gln Arg Gln Ala Cys Lys Lys His Glu Leu Tyr 325 190 Val Ser Phe Arg Asp Leu Gly Trp Gln Asp Trp Ile Ile Ala Pro Glu 345 340 194 Gly Tyr Ala Ala Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asn 355 360 198 Ser Tyr Met Asn Ala Thr Asn His Ala Ile Val Gln Thr Leu Val His 375 380 199 370 202 Phe Ile Asn Pro Glu Thr Val Pro Lys Pro Cys Cys Ala Pro Thr Gln 390 395 206 Leu Asn Ala Ile Ser Val Leu Tyr Phe Asp Asp Ser Ser Asn Val Ile 410 405 210 Leu Lys Lys Tyr Arg Asn Met Val Val Arg Ala Cys Gly Cys His 420 211 214 <210> SEQ ID NO: 4 215 <211> LENGTH: 139 216 <212> TYPE: PRT 217 <213> ORGANISM: Mus musculus 219 <400> SEQUENCE: 4 221 Ser Thr Gly Gly Lys Gln Arg Ser Gln Asn Arg Ser Lys Thr Pro Lys 225 Asn Gln Glu Ala Leu Arg Met Ala Ser Val Ala Glu Asn Ser Ser Ser 2.0 25 229 Asp Gln Arg Gln Ala Cys Lys His Glu Leu Tyr Val Ser Phe Arg 233 Asp Leu Gly Trp Gln Asp Trp Ile Ile Ala Pro Glu Gly Tyr Ala Ala 55 237 Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asn Ser Tyr Met Asn 241 Ala Thr Asn His Ala Ile Val Gln Thr Leu Val His Phe Ile Asn Pro • 85 90 245 Asp Thr Val Pro Lys Pro Cys Cys Ala Pro Thr Gln Leu Asn Ala Ile 105 249 Ser Val Leu Tyr Phe Asp Asp Ser Ser Asn Val Ile Leu Lys Lys Tyr 250 115 120 253 Arg Asn Met Val Val Arg Ala Cys Gly Cys His 130 257 <210> SEQ ID NO: 5 258 <211> LENGTH: 139 259 <212> TYPE: PRT 260 <213> ORGANISM: Homo sapiens 262 <400> SEQUENCE: 5 264 Ala Val Arg Pro Leu Arg Arg Arg Gln Pro Lys Lys Ser Asn Glu Leu

Input Set : A:\JJJ-P01-599.txt

Output Set: N:\CRF4\08202005\J650326B.raw

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268 Pro Gln Ala Asn Arg Leu Pro Gly Ile Phe Asp Asp Val His Gly Ser
272 His Gly Arg Gln Val Cys Arg Arg His Glu Leu Tyr Val Ser Phe Gln
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276 Asp Leu Gly Trp Leu Asp Trp Val Ile Ala Pro Gln Gly Tyr Ser Ala
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280 Tyr Tyr Cys Glu Gly Glu Cys Ser Phe Pro Leu Asp Ser Cys Met Asn
                       70
284 Ala Thr Asn His Ala Ile Leu Gln Ser Leu Val His Leu Met Lys Pro
288 Asn Ala Val Pro Lys Ala Cys Cys Ala Pro Thr Lys Leu Ser Ala Thr
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292 Ser Val Leu Tyr Tyr Asp Ser Ser Asn Asn Val Ile Leu Arg Lys His
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302 <212> TYPE: PRT
303 <213> ORGANISM: Mus musculus
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315 Arg Gly Arg Glu Val Cys Arg Arg His Glu Leu Tyr Val Ser Phe Arg
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                               40
319 Asp Leu Gly Trp Leu Asp Trp Val Ile Ala Pro Gln Gly Tyr Ser Ala
                           55
323 Tyr Tyr Cys Glu Gly Glu Cys Ala Phe Pro Leu Asp Ser Cys Met Asn
327 Ala Thr Asn His Ala Ile Leu Gln Ser Leu Val His Leu Met Lys Pro
331 Asp Val Val Pro Lys Ala Cys Cys Ala Pro Thr Lys Leu Ser Ala Thr
              100
                                   105
335 Ser Val Leu Tyr Tyr Asp Ser Ser Asn Asn Val Ile Leu Arg Lys His
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339 Arg Asn Met Val Val Lys Ala Cys Gly Cys His
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344 <211> LENGTH: 588
345 <212> TYPE: PRT
346 <213> ORGANISM: Drosophila melanogaster
348 <400> SEQUENCE: 7
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354 Ile Val Arg Val Ala Ser Thr Glu Asp Ile Ser Gln Arg Phe Ile Ala
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Output Set: N:\CRF4\08202005\J650326B.raw

358 359	Ala	Ile	Ala 35	Pro	Val	Ala	Ala	His 40	Ile	Pro	Leu	Ala	Ser 45	Ala	Ser	Gly
	Ser	Gly 50	Ser	Gly	Arg	Ser	Gly 55	Ser	Arg	Ser	Gly	Gly 60	Ala	Ser	Thr	Ser
366			Leu	Ala	Lys			Asn	Pro	Phe			Pro	Ala	Ser	
367 370		Asp	Ser	Asp	Lvs	70 Ser	His	Arq	Ser	Lvs	75 Thr	Asn	Lys	Lvs	Pro	80 Ser
371				_	85					90			_		95	
374 375	Lys	Ser	Asp	Ala 100	Asn	Arg	Gln	Phe	Asn 105	Glu	Val	His	Lys	Pro 110	Arg	Thr
	7	a 1	T	Glu	7	0	T	7		0	T	~1	T		7	T
379	Asp	GIII	115	GIU	ASII	ser	цуѕ	120	Mec	ser	пуs	GIII	125	vai	ASII	пуъ
382	Pro	Asn	His	Asn	Lys	Met	Ala	Val	Lys	Glu	Gln	Arg	Ser	His	His	Lys
383		130			_		135		_			140				_
386	Lys	Ser	His	His	His	Arq	Ser	His	Gln	Pro	Lys	Gln	Ala	Ser	Ala	Ser
	145					150					155					160
390	Thr	Glu	Ser	His	Gln	Ser	Ser	Ser	Ile	Glu	Ser	Ile	Phe	Val	Glu	Glu
391					165					170					175	
	Pro	Thr	Leu	Val		Asp	Ara	Glu	Val	Ala	Ser	Ile	Asn	Val	Pro	Ala
395				180		Ľ	J		185				•	190		
	Asn	Ala	Lvs	Ala	Ile	Ile	Ala	Glu	Gln	Glv	Pro	Ser	Thr		Ser	Lvs
399			195					200		1			205	-1-		-1-
402	Glu	Ala	Leu	Ile	Lys	Asp	Lys	Leu	Lys	Pro	Asp	Pro	Ser	Thr	Leu	Val
403		210					215					220				
406	Glu	Ile	Glu	Lys	Ser	Leu	Leu	Ser	Leu	Phe	Asn	Met	Lys	Arg	Pro	Pro
407	225					230					235					240
410	Lys	Ile	Asp	Arg	Ser	Lys	Ile	Ile	Ile	Pro	Glu	Pro	Met	Lys	Lys	Leu
411		_			245					250					255	
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415				260					265					270		
	Pro	Gly		Leu	Thr	Lys	Ser		Asn	Thr	Val	Arg		Phe	Thr	His
419			275					280					285			
422	Lys	_	Ser	Lys	Ile	Asp	_	Arg	Phe	Pro	His		His	Arg	Phe	Arg
423		290			_		295	_		_		300				
		His	Phe	Asp	Val	-	Ser	Ile	Pro	Ala	_	Glu	Lys	Leu	Lys	
	305					310			_		315			-	-	320
	Ala	Glu	Leu	Gln		Thr	Arg	Asp	Ala		Ser	Gln	Gln	Val		Ala
431					325					330					335	
	Ser	Arg	Ser	Ser	Ala	Asn	Arg	Thr	Arg	Tyr	Gln	Val	Leu	Val	Tyr	Asp
435				340					345					350		
438	Ile	Thr	Arg	Val	Gly	Val	Arg	Gly	Gln	Arg	Glu	Pro	Ser	Tyr	Leu	Leu
439			355					360					365			
442	Leu	Asp	Thr	Lys	Thr	Val	Arg	Leu	Asn	Ser	Thr	Asp	Thr	Val	Ser	Leu
443		370					375					380				
446	Asp	Val	Gln	Pro	Ala	Val	Asp	Arg	Trp	Leu	Ala	Ser	Pro	Gln	Arg	Asn
	385					390					395					400
450	Tyr	Gly	Leu	Leu	Val	Glu	Val	Arg	Thr	Val	Arg	Ser	Leu	Lys	Pro	Ala
451			•		405					410					415	
454	Pro	His	His	His	Val	Arg	Leu	Arg	Arg	Ser	Ala	Asp	Glu	Ala	His	Glu

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Output Set: N:\CRF4\08202005\J650326B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:24; Xaa Pos. 55,56,57,58,59,60,63,65,66,67,68,69,70,71,72,74,75,76,77
Seq#:24; Xaa Pos. 78,79,80,82,84,85,86,87,88,90,92,93,95,97
Seq#:25; Xaa Pos. 2,3,4,5,7,8,9,11,12,13,16,17,18,19,20,21,23,24,25,26,28
Seq#:25; Xaa Pos. 31,33,35,36,38,39,40,41,42,43,44,45,49,50,51,52,53,54,55
Seq#:25; Xaa Pos. 56,57,58,59,60,61,62,63,64,65,68,70,71,72,73,74,75,76,77
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Seq#:28; Xaa Pos. 47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,65
Seq#:28; Xaa Pos. 66,68,70,71,72,73,74,75,76,77,79,80,81,82,83,84,85,86,87
Seq#:28; Xaa Pos. 88,89,90,91,92,93,94,95,96,97,98,100,102
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Seq#:29; Xaa Pos. 75,80,82,84,89,96
Seq#:30; Xaa Pos. 2,3
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Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

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Seq#:25; Line(s) 2484
Seq#:26; Line(s) 2890
Seq#:27; Line(s) 2924
Seq#:28; Line(s) 3403
Seq#:29; Line(s) 3893
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DATE: 08/20/2005

TIME: 11:47:46

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/650,326B

Input Set : A:\JJJ-P01-599.txt

Output Set: N:\CRF4\08202005\J650326B.raw

L:2451 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0 M:341 Repeated in SeqNo=24 L:2856 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0 M:341 Repeated in SeqNo=25 L:2914 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0 L:3369 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 M:341 Repeated in SeqNo=27 L:3405 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order! L:3507 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28 L:3741 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28 L:3749 M:283 W: Missing Blank Line separator, <220> field identifier L:3857 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:28 L:3859 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0 M:341 Repeated in SeqNo=28 L:4039 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:29 L:4041 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0 M:341 Repeated in SeqNo=29

L:4083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0